What is claimed is:

1. A method of manufacturing an imaging component comprising:

placing a focusing device in between a laser generator and a scintillator element, said scintillator element comprised of a substantially isotropic portion;

generating a laser using said laser generator;

focusing said laser using said focusing device such that a focal spot of the laser is coincident with a portion of said isotropic portion;

using said laser to alter the optical properties at said focal spot such that anisotropy is generated in said isotropic portion; and

moving said focal spot relative to said scintillator element such that a three-dimensional pattern with altered optical properties is generated, said three-dimensional pattern controlling the spread of photons within said scintillator element.

2. A method of manufacturing an imaging component as in claim 1 wherein said scintillator element comprises a single crystal element.

3. A method of manufacturing an imaging component as in claim 1 wherein said scintillator element comprises a glass element.

4. A method of manufacturing an imaging component as in claim 1 wherein said scintillator element comprises a ceramic element.

5. A method of manufacturing an imaging component as in claim 1 further comprising:

integrating said scintillator element into a computed tomography assembly.

6. A method of manufacturing an imaging component as in claim 1 further comprising:

integrating said scintillator element into an x-ray imaging assembly.

7. A method of manufacturing an imaging component as in claim 1 further comprising:

integrating said scintillator element into a positrons emissions tomography assembly.

8. A method of manufacturing an imaging component as in claim 1 wherein said laser generator comprises a picosecond pulse laser.

9. A method of manufacturing an imaging component as in claim 1 wherein said laser generator comprises a femtosecond pulse laser.

10. A method of manufacturing an imaging component as in claim 1 wherein said laser generator comprises a titanium sapphire laser.

11. A method of manufacturing an imaging component as in claim 10 wherein said titanium sapphire laser is regeneratively amplified.

12. A method of manufacturing an imaging component as in claim 1 wherein said altering the optical properties comprises:

changing the crystal structure within a crystalline scintillator element.

13. A method of manufacturing an imaging component as in claim 1 wherein said altering the optical properties comprises:

creating localized crystal domains of different orientation that the surrounding crystalline material in a crystalline element.

14. A method of manufacturing an imaging component as in claim 1 wherein said altering the optical properties comprises:

creating localized crystalline regions within a non-crystalline element.

15. A method of manufacturing an imaging component as in claim 1 wherein said altering the optical properties comprises:

creating localized non-crystalline regions within a crystalline element.

16. A method of manufacturing an imaging component as in claim 1 wherein said altering the optical properties comprises:

generating micro-voids within the scintillator element.

17. A method of manufacturing an imaging component as in claim 1 wherein said altering the optical properties comprises:

changing index of refraction at said focal spot.

18. A method of manufacturing an imaging component as in claim 1 wherein said altering the optical properties comprises:

changing optical absorption at said focal spot.

19. A method of manufacturing an imaging component as in claim 1 wherein said altering the optical properties comprises:

changing photon scattering properties at said focal spot.

20. A method of manufacturing an imaging component as in claim 1 wherein said three-dimensional pattern comprises:

a plurality of first planes formed across said scintillator element; and

a plurality of second planes formed across said scintillator element, said plurality of second planes intersecting said plurality of first planes to form a plurality of scintillator cells.

21. A method of manufacturing an anisotropic scintillator for use in an imaging system comprising:

placing a scintillator element in communication with a focusing device and a pulse laser generator;

generating a pulse laser using said pulse laser generator;

focusing said pulse laser using said focusing device such that a focal spot of said pulse laser is coincident with a portion of said scintillator element;

using said pulse laser to alter the optical properties at said focal spot such that anisotropy is generated in said scintillator element; and

moving said focal spot relative to said scintillator element such that a three-dimensional pattern with altered optical properties is generated, said three-dimensional pattern controlling the spread of photons within said scintillator element.

22. A method of manufacturing an anisotropic scintillator for use in an imaging system as described in claim 21, wherein said using a pulse laser to alter optical properties comprises:

generating micro-voids within the scintillator element.

23. A method of manufacturing an anisotropic scintillator for use in an imaging system as described in claim 21, wherein said using a pulse laser to alter optical properties comprises:

changing index of refraction at said focal spot.

24. A method of manufacturing an anisotropic scintillator for use in an imaging system as described in claim 21, wherein said using a pulse laser to alter optical properties comprises:

changing optical absorption at said focal spot.

25. A method of manufacturing an anisotropic scintillator for use in an imaging system as described in claim 21, wherein said using a pulse laser to alter optical properties comprises:

changing photon scattering properties at said focal spot.

26. An anisotropic scintillator for use in an imaging system comprising:

a scintillator element comprised of a scintillator material having a first optical property;

a three-dimensional pattern formed in said scintillator element utilizing a pulse laser, said pulse laser altering said first optical property at a plurality of locations within said scintillator element such that said three-dimensional pattern is comprised of a second optical property;

wherein said three-dimensional pattern controls the spread of photons within said scintillator element.

27. An anisotropic scintillator for use in an imaging system as described in claim 26, wherein said three-dimensional pattern comprises:

a plurality of first parallel planes formed across said scintillator element; and

a plurality of second parallel planes formed across said scintillator element perpendicular to said plurality of first parallel planes, said plurality of second parallel planes intersecting said plurality of first parallel planes to form a plurality of scintillator cells.

28. An anisotropic scintillator for use in an imaging system as described in claim 26, wherein said scintillator element comprises a single crystal element.

29. An anisotropic scintillator for use in an imaging system as described in claim 26, wherein said scintillator element comprises a ceramic element.